

APPLIED MATHEMATICS AND COMPUTATION

VOLUME 39

RENPU GE

- The Filled Function Transformations for Constrained
Global Optimization1

MITALI DE, KEITH W. HIPEL, AND D. MARC KILGOUR

- Algorithms for Hierarchical Power21

D. D. BAINOV AND A. B. DISHLIEV

- Population Dynamics Control in Regard to Minimizing
the Time Necessary for the Regeneration of a Biomass
Taken Away from the Population37

KRYSTIAN KUBICA AND JANINA KUCZERA

- An Application of Cellular Automata to Model
a Lipid Membrane49

LINDA ALLEN, TRUMAN LEWIS, CLYDE F. MARTIN, AND

MARK STAMP

- A Mathematical Analysis and Simulation of a Localized
Measles Epidemic61

R. FAZIO

- A Noniterative Transformation Method Applied
to Two-Point Boundary-Value Problems79

SHEN ZUHE AND M. A. WOLFE

- On Interval Enclosures Using Slope Arithmetic89

FERENC SZIDAROVSKY

- On the Convergence of Nonstationary Algorithms
Modeled by Point-to-Set Maps107

IOANNIS K. ARGYROS

- The Secant Method in Generalized Banach Spaces111

CHRISTOPH KOPF

- Invariant Measures for Piecewise Linear Transformations123

JAMES D. EVANS	
Applications of Complex Variable Residue Theory to the Evaluation of Irrational Definite Integrals. I	145
BALA SHETTY	
Approximate Solutions to Large Scale Capacitated Facility Location Problems	159
JAMES D. EVANS	
Applications of Complex Variable Residue Theory to the Evaluation Solution of Irrational Definite Integrals. II	177
HORST EISSFELLER AND SILVIA MELITTA MÜLLER	
A Note on Reducing Communication Costs in Explicit Time Stepping Methods on Parallel Computers	191
A. K. MITRA	
Graphing Implicit Functions $f(x,y) = 0$	199
CLYDE MARTIN AND SHISHEN XIE	
Observability of the Electropotential on a Nested Cylindrical Domain. I. The Continuous Solution	207
CLYDE MARTIN AND SHISHEN XIE	
Observability of the Electropotential on a Nested Cylindrical Domain. II. Numerical Solution	245
DONALD A. FRENCH AND JACK W. SCHAEFFER	
Continuous Finite Element Methods Which Preserve Energy Properties for Nonlinear Problems	271
VOLUME CONTENTS	

